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STATE EMPLOYEE SALARY AND BENEFIT SURVEY

1982

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TED SCHWINDEN GOVERNOR

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STATE OF MONTANA

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HELENA, MONTANA 59620

February 1, 1983

The Honorable Ted Schwinden
Governor of Montana
State Capitol
Helena, Montana 59620

Dear Governor Schwinden:

Attached is the 1982 Montana Salary and Benefit Survey conducted by the Personnel Division. This report was prepared in compliance with Title 2, Chapter 18, MCA, which requires that the Department of Administration continually maintain the state classification and pay plan. A critical element in the maintenance of the plan is to assure that state employees are appropriately compensated for their services.

The attached report describes the methods used and the data obtained in the survey. The information included in this report was gathered and analyzed in order to help address a variety of issues regarding employee compensation and benefits in Montana state government.

I wish to express my thanks for the cooperation and assistance received from the many employers who provided the information that made this study possible.

Sincerely,

Dennis M. Taylor
Administrator
Personnel Division

AN EQUAL OPPORTUNITY EMPLOYER

APR 2 7 1983

STATE EMPLOYEE SALARY AND BENEFIT SURVEY 1982

by DEPARTMENT OF ADMINISTRATION

PERSONNEL DIVISION

RESEARCHERS:

JOSEPH MICHAUD
and
DENISE BOYETT

ABSTRACT

The primary purpose of the salary survey is to compare salaries and benefits paid to occupational skills that the state needs to carry out mandated services. The competitiveness of state salaries at those grade levels having the bulk of state employees is also considered. Key classes were selected to represent both occupational groups and grade levels. Data were solicited for these selected classes to determine the state's ability to compete for qualified people in various occupational groups and at various grade levels.

The survey was divided into an in-state survey of Montana based employers and an out-of-state survey of surrounding state governments to reflect the different labor markets in which the state competes. Forty-two key classes were selected for the in-state survey, 107 key classes were selected for the out-of-state survey, and twelve classes were selected to be common to both surveys.

For the in-state survey, 424 Montana based employers were sampled. The out-of-state survey was conducted among nine states in the Rocky Mountain area. The survey was conducted during September of 1982. All 9 states and 172 of the 424 Montana employers responded. These responding employers employ a total of 154,686 employees. The survey produced 2,470 job matches representing the salaries of at least 37,741 job incumbents.

In general, the following conclusions can be drawn from this salary and benefit survey:

1. Most lower graded state salaries are near or above market averages, while state salaries at classified grades 11 and above tend to be below market averages.
2. Except for teachers, state salaries of employees paid by special pay matrices (retail clerks, blue collar, etc.) are at or above market averages.
3. The salaries of most of the state's experienced professionals and managers continue to be significantly below market averages.
4. There is evidence that most employers in both labor markets increase the salaries of satisfactory employees faster than the State of Montana. The state's minimum salaries are generally more competitive than its maximum and average or midpoint salaries.
5. Evidence from both surveys suggest that the state's classification system allocates grade levels from a perspective of value to the organization and treats predominatly female occupations the same as predominantly male occupations. There tends to be more salary differences of this type in the market place than within the state's system.

6. The state's group insurance contribution is about in line with the market.
7. The state's retirement contribution is below the average of neighboring state contributions but slightly above the average of Montana employer contributions.
8. State employees receive more paid leave time than those employed elsewhere in the two labor markets.
9. State pay and benefit increases during this biennium maintained the state's market position for experienced professionals and managers and improved the state's market position for lower graded positions.
10. This biennium's percentage rather than flat dollar adjustments to classified grades 15 and above kept the state's market position at these levels from further deterioration and prevented further salary compression.

The general recommendations resulting from this survey are as follows:

1. In providing general pay adjustments for the next biennium, anticipate what the labor market and economy will be like. If inflation continues its decline and economic growth is sustained, then small or negative adjustments could be costly to the state by lowering its competitive position in the labor market. On the other hand, if interest rates rise again and unemployment continues to climb, larger increases would cause the state and other employers to have excessive personal service costs as voluntary terminations would be deterred and qualified replacements could be obtained for less from a larger source. History and the prevailing optimism of human nature predict that over the next two years average salaries will be somewhat higher than they are now.
2. Be cautious with flat dollar type wage settlements. The effects on grade relationships should be studied in advance of such settlements.
3. Pay adjustments to special occupational groups, such as engineers, not involving classification actions do not seem warranted at this time.
4. More of an effort should be made to coordinate skill levels among the state's various pay systems. Gradual corrections should be made to move toward equity throughout state government.
5. Work toward feasible pay mechanisms that reward above average productivity and performance of assigned job duties.

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STATE EMPLOYEE SALARY AND BENEFIT SURVEY 1982

SURVEY DEVELOPMENT

For pay purposes, all Montana state employees are in one of the following categories:

1. Elected legislators.
2. Legislative staff.
3. Elected judges (7 Supreme Court Justices and 32 District Court Judges) and the Clerk of the Supreme Court.
4. Judicial staff.
5. Exempt staff of the Montana University System.
6. University System staff under academic contract.
7. Teachers at the State School for the Deaf and Blind.
8. Blue collar and other non-classified employees of the University System.
9. Elected executive officials (Governor, Lieutenant Governor, Secretary of State, Attorney General, State Auditor, Superintendent of Public Instruction, and five Public Service Commissioners).
10. Personal staff of elected executive officials including department directors.
11. Board eligible physicians at state institutions.
12. Teachers at state institutions.
13. Blue collar crafts not under the state classification system.
14. State liquor store employees.
15. Classified employees in the Executive branch and in the University System.

The overwhelming majority of state employees (approximately 12,400 of 15,000) are in category 15. Previous state salary surveys conducted by the State Personnel Division covered only classified employees. Since the Personnel Division is responsible for overseeing the pay systems of employees in categories 11 through 15, this survey attempts to represent each of these.

Employees in general perform their assigned job duties in anticipation of rewards or out of fear of punishment. Pay is only one of the various positive or negative work motivators. When pay is less than what employees expect for their efforts expended, increased turnover, absenteeism, job dissatisfaction and adverse performance modification will most likely follow.* These employee pay expectations result from employees making pay comparisons with those employed elsewhere but performing similar duties (external equity) and making pay comparisons with other state employees through consideration of perceived efforts expended and importance of organizational goals attained (internal equity). Of the two, perceived internal equity has a greater impact on pay satisfaction than perceived external equity.**

* Nan Weiner, "Determinants and Behavioral Consequences of Pay Satisfaction: A Comparison of Two Models," *Personnel Psychology*, 33, 1980, p.741.

** Lee Dyer, Donald P. Schwab and John A. Fossum, "Impacts of Pay on Employee Behaviors and Attitudes: An Update," *The Personnel Administrator*, 23, 1978, pp.51-58.

Because the objective of pay and benefits administration is to make the best use personal service expenditures, this survey is primarily concerned with identifying pay inequities. Even though the focus of the survey is on external comparisons; resulting analyses, decisions and recommendations should also consider internal factors.

When making pay decisions, whether general or individual, the following factors should be studied:

1. budget and cash flow;
2. the effectiveness of management in recruiting and selecting employees;
3. economic and labor market conditions;
4. prevalent social attitudes;
5. personal attributes of those recruited, selected and retained;
6. the nature of duties and responsibilities inherent in the job;
7. the way management values positions in relation to one another;
8. the effectiveness of management in developing and using the skills of employees;
9. employee expectations, perceptions and observations;
10. organizational attitudes about accomplishing its goals and objectives; and
11. organizational attitudes about motivating employees to accomplish its goals and objectives.*

* Lee Dyer, Donald P. Schwab and John A. Fossum, "Impacts of Pay on Employee Behaviors and Attitudes: An Update," *The Personnel Administrator*, 23, 1978, pp. 51-58.

Historically, the practice of providing annual state employee salary increases has been to negotiate wage settlements with unions based on a general formula. Prior to agreeing to a general pay increase formula, both negotiating parties reasonably conceptualize such things as budget and cash flow; economic and labor market conditions; and employee expectations, perceptions and observations. In the past, the settlement formula has consisted of a flat dollar increase coupled with a percentage increase. Thus, the positive aspect of this procedure is that it allows the opportunity to consider all of the above pay decision factors. On the negative side, these formulas tend to gradually reduce pay differentials between grades and create less competitive salaries at the higher skill level.

This practice can be contrasted with the prevailing wage principle used by some other government jurisdictions as a general standard of wage determination. As an example, the law applied to pay for Federal employees specifies that pay rates be "comparable with private industry pay rates for the same levels of work." Michigan and Colorado are examples of states that emphasize the prevailing wage principle in providing annual pay adjustments.

Using the prevailing wage principle as the primary factor for setting salaries will benefit the employer in hiring and keeping highly demanded and skilled employees. However, strict adherence to the prevailing wage principle also has its problems.

One problem is that this practice has the tendency to break down established internal pay relationships. Internal pay dissatisfaction can result in increased turnover, absenteeism, and an overall decline in employee productivity.

Another problem is that the average pay practice of surveyed employers becomes the state's pay practice. This may or may not reflect management's values and priorities regarding state goals and objectives. In addition, those actively pursuing the "equal pay for work of comparable worth" principle oppose tying wage increases directly to prevailing wage standards because they feel that the market tends to perpetuate institutional biases in certain organizational categories.

One of the most important pay decisions to be made is establishing and maintaining internal pay relationships. This salary survey was designed to reveal how the state is doing in this regard. Key classes were selected to represent all of the relevant classified skill levels (grades 4 through 22). Several classes of non-classified positions were also included.

Occasionally, state managers feel that they need to pay more to recruit or retain highly qualified and demanded job skills. Substantiation of these contentions is easier if comparative survey data are available on all state occupations. The key classes selected for this survey provide a representation of all state occupations.

General pay increases should be designed to maintain the purchasing power of state employees in relation to those employed elsewhere. Failure to do this, unless reasonably justified and explained, will probably result in pay dissatisfaction with its adverse consequences. The salary survey attempts to tell what is happening to the purchasing power of these other employees.

HYPOTHESIZED RESULTS

Previous state salary surveys resulted in the following general conclusions:

1. Most state employee salaries have been at

least slightly below market averages.

2. The salaries of the state's experienced professionals and managers have been significantly below market averages.
3. Other employers have increased the salaries of satisfactory employees faster than the state of Montana.
4. With a few exceptions, the state has valued job skills similar to other employers.
5. The state group insurance and retirement contributions have been slightly less than those provided by other employers.

Two changes were made during this biennium that could slightly alter this year's salary survey findings. First, since state salary ranges were increased by at least 8.7% in each of two consecutive years, market disparity may have been offset. Second, since percentage increases, instead of a settlement formula including flat dollar adjustments, were used to provide increases to salaries in grades 15 and above, further market disparity and salary compression for these levels may have been avoided.

SELECTION OF KEY CLASSES

The survey is designed to make salary comparisons to two different labor markets. It is assumed that recruitment for clerical, technical, crafts and miscellaneous personnel is generally carried out within the state of Montana. It is also assumed that the state competes for professional talent in-state, regionally and sometimes nationally. However, migration statistics suggest that most of our professional employees are recruited from the Rocky Mountain area, West Coast or from the northernmost Midwestern states. Previous salary surveys have suggested that average data obtained from the Rocky Mountain states do not significantly change with the addition of West Coast or Midwest states. It is also assumed and known to some extent that the other Rocky Mountain states design their salary systems to compete for qualified professional and non-professional talent within their own state and region.

Key classes for both the in-state and out-of-state surveys were selected in the same manner. Key classes had to represent the range of work in state government and be capable of producing matches with other employers. Enough key classes were selected to represent all state occupational groups and most skill levels whether classified or not. Yet, the number of selected classes were limited so that employers would not be unnecessarily discouraged from participating in the survey. The exact steps taken to select key classes are listed on pages 13a — 15a of the Technical Report.

The final list consisted of 161 key classes. Forty-two of these were to be matched in the in-state labor market, 107 in the out-of-state market, and 12 in both labor markets. The table on pages 16a and 17a of the Technical Report represents the degree to which grades (skill levels) are represented by the selected key classes, while the table on pages 18a and 19a of the Technical Report presents the degree to which occupational groups are represented by the selected key classes. Pages 20a through 25a of the Technical Report lists each key class by occupational group.

IN-STATE EMPLOYERS

As mentioned earlier in this report, it is assumed that recruitment for clerical, technical, crafts and miscellaneous personnel is generally carried out within the state of Montana. In order to make pay comparisons, the in-state employer sample was selected in a similar manner as past state salary surveys. The Department of Labor and Industry publishes a list of firms whose employees are covered by the unemployment insurance program. This list includes nearly every employer operating within the state of Montana.

The Department of Labor and Industry lists employers according to the number of people employed. This list made it possible to stratify a random selection of employers by size.

The sample was set up so that larger firms would have a greater chance to be selected for the survey. This method was used to control the costs of obtaining adequate job matches and to compare salaries with those employers most apt to have competitive job openings. Smaller firms were screened because they were less likely to have jobs that match those found in state government. Having used smaller employers in previous state salary surveys has confirmed these contentions.

Every employer with 250 or more people employed in Montana was selected to be surveyed. As in the 1980 survey, two of three firms with 100 to 250 employees and one of three firms with 50 to 100 employees were chosen in a random fashion.

Only 57 firms with 20 to 50 employees are included in the in-state employer sample. The reason for including these few smaller firms was to ensure more job matches for those classes where insufficient responses were expected unless these employers were added. The expectation was based on previous survey experience and on Department of Labor and Industry reports that estimate various occupational employment by industry. These reports suggest that most plumbers in Montana are employed by plumbing firms; that most mechanics are employed by automobile dealers and repair establishments; that most laundry workers are employed by laundry and cleaning establishments; that many custodians are employed by firms offering this type of personal service; that computer personnel are often employed by firms offering business services, and; that drafters are usually employed by engineering/architecture firms. These conclusions are obvious but are worthy of mention because without expanding the employer sample to include more of these types of firms, sufficiently reliable data for the classes could not have been possible.

The resulting employer sample is reflected in the following table as is the number of selected employers that responded to the survey. The response rate of 41% is about what was expected.

Despite the fact that the employer sample is stratified, there is no need to weigh response results. The logic behind this decision is that during any given period of time, larger firms are more apt to compete with the state for specific types of personnel. Thus, what the smaller firms are paying their employees will not matter as much as the larger firms because smaller firms have fewer employees and are not as often in the labor market looking for qualified talent.

IN-STATE EMPLOYER SAMPLE AND RESPONSE

Size of firm by # of Employees	# of Responding Employers	# of Surveyed Employers	# of Employers in Montana
1000 or more	12	12	12
500-999	14	25	25
250-499	20	44	44
100-249	60	155	225
50- 99	44	141	420
1- 19	—	—	21,000
TOTAL	172	424	23,228

OUT-OF-STATE EMPLOYERS

In previous state salary surveys, migration statistics, per capita income, population density, and physical proximity were among the factors used to select the states from which to solicit salary data. Migration statistics indicate that Montana jobs taken by out-of-stater's are most likely taken by people moving from the rest of the Rocky Mountain states, from the West Coast, or perhaps from the northernmost midwestern states and are not likely to be taken by people from the deep South or East Coast. In the last survey, data from 9 Rocky Mountain states were analyzed and found to be fairly similar to data provided by an expanded list of 15 regional states and to data provided by all 50 states. Thus, data obtained from the following selected nine states seem to sufficiently meet our needs: Arizona, Colorado, Idaho, Nevada, New Mexico, North Dakota, South Dakota, Utah and Wyoming.

TOOLS USED TO ANALYZE DATA

The Statistical Package for the Social Sciences (SPSS) was used to calculate basic statistics on most of the data collected. For ordinal and nominal data, SPSS was used to provide absolute, relative and cumulative response frequencies. For interval data, SPSS was used to calculate mean, median, mode, range, standard deviation, standard error and sample size.

CULPRIT programs were prepared to make the statistics derived from SPSS most presentable to the reader and to calculate Montana z-scores by using the means and standard deviation of the sal-

ary data collected. SPSS and CULPRIT are simply software packages available in the state's computer system used to help make the results of this survey more easily understood and meaningful for making corrective decisions.

An explanation of the statistics used to compare the survey responses to state practices is provided on page 26a of the Technical Report. These statistics include sample mean as an estimate of the universe mean, standard error of the sample mean, standard deviation of the sample mean, Montana z-score, and the lowest reported salaries.

SALARY DATA AND TOTAL COMPENSATION

The "Job Match Response Form" as explained on pages 1a and 2a of the Technical Report asks for minimum, maximum and actual average salaries. All three figures are necessary because conflicting results obtained from any two could indicate differences among employer pay practices.

In the in-state survey, 69% of the total job matches resulted in the reporting of minimum and maximum salaries. Naturally this figure varies by occupation. For example, in more than half of the cases, minimums and maximums were not provided for the craft occupations. Actual average salaries and the number of actual incumbents were reported in 90% of the job matches provided by Montana employers.

In the survey of neighboring states, minimum and maximum salaries were provided in all but 6 of 866 job matches. Because one state was unable to provide actual average salaries and because there were occasionally no job incumbents in the matches provided, the actual average salary was unavailable in 15% of the cases. In 5% of the cases, the number of incumbents was not provided.

Wherever actual average salaries are not provided, midpoints were calculated and combined with the actual average salaries provided for comparison purposes. This allows for every job match to be illustrated by one statistic.

The "General Compensation and Benefit Questionnaire" (shown on pages 4a to 7a of the Technical Report) asks for some information in a way that is easiest to calculate comparable total compensation figures. Leave costs equal "average days paid leave usage per employee" (question 13) divided by 260 (the number of potential working days per year) less the response to question 13 times average salary, if available, otherwise midpoint salary. Social security costs, for employers answering "yes" to question 14, equal average or midpoint salary times 0.067 (the effective social security tax rate) not to exceed $167.50 per month. Retirement and profit-sharing costs (question 15) equal the percent employer contributions times average or midpoint salary. These three costs plus the insurance contribution (question 16) plus average or midpoint salary equals total compensation.

GENERAL SURVEY RESULTS

The following table depicts the general survey results for all grades and classes. In-state 54 classes were matched a total of 1,604 times involving 16,732 employees, while out-of-state 119 classes were matched a total of 866 times involving 21,009 employees. Montana continues to rank behind its neighbor states but not necessarily behind other employers within the state in paying competitive salaries.

Employer Sample	Salary	Percent Montana is Above (Below) Survey
Neighboring States	Minimum	(4.8)*
	Maximum	(11.3)
	Average or Midpoint	(7.8)
	Total Compensation	(7.0)
Montana Employers	Minimum	7.0
	Maximum	7.7
	Average or Midpoint	5.0
	Total Compensation	9.7

* Excludes classes paid according to special pay matrices as these statistics would unreasonably change the results.

Montana's average classified grade level is 11. The average grade of classes surveyed within the neighboring states is 13 while that for classes surveyed within Montana is 9. It is important to note this as it generally explains why the overall results of the survey of neighboring states differ from the overall results of the survey of Montana employers.

SURVEY RESULTS FOR ALL KEY CLASSES

Overall, the survey of neighboring states indicates that Montana salaries are generally less than the average of these nine states. This discrepancy averages about 8% below market, which is nearly the same as in 1980 when the discrepancy averaged about 9% below market. The 8% difference may be tolerated but may also be signalling external pay inequity and potential pay dissatisfaction. If the latter is true, then pay adjustments that put the state further behind could be costly due to productivity losses and added personnel costs. State salaries at the lower grade levels are generally above the average salaries paid by other Montana employers.

The total value of the state's benefits is generally greater than that provided by employers in both selected labor markets. Thus, the competitiveness of state jobs improves by adding benefits to average salaries to be emphasized as a total compensation package.

GRADE LEVEL COMPARISONS

Graph 1 illustrates the state's salary competitiveness within the various classified grade levels. The exact percentage differences are shown on pages 27a and 28a of the Technical Report. It appears that the state is noticeably paying below average and increasingly less competitive at grades 11 through 22. At these higher grades the neighboring state comparisons are more representative of grade levels since more diverse classes were surveyed. The state seems to be fairly competitive at grades 10 and below.

The physicians pay plan is represented by grades 31 and 32. These state salaries are above average.

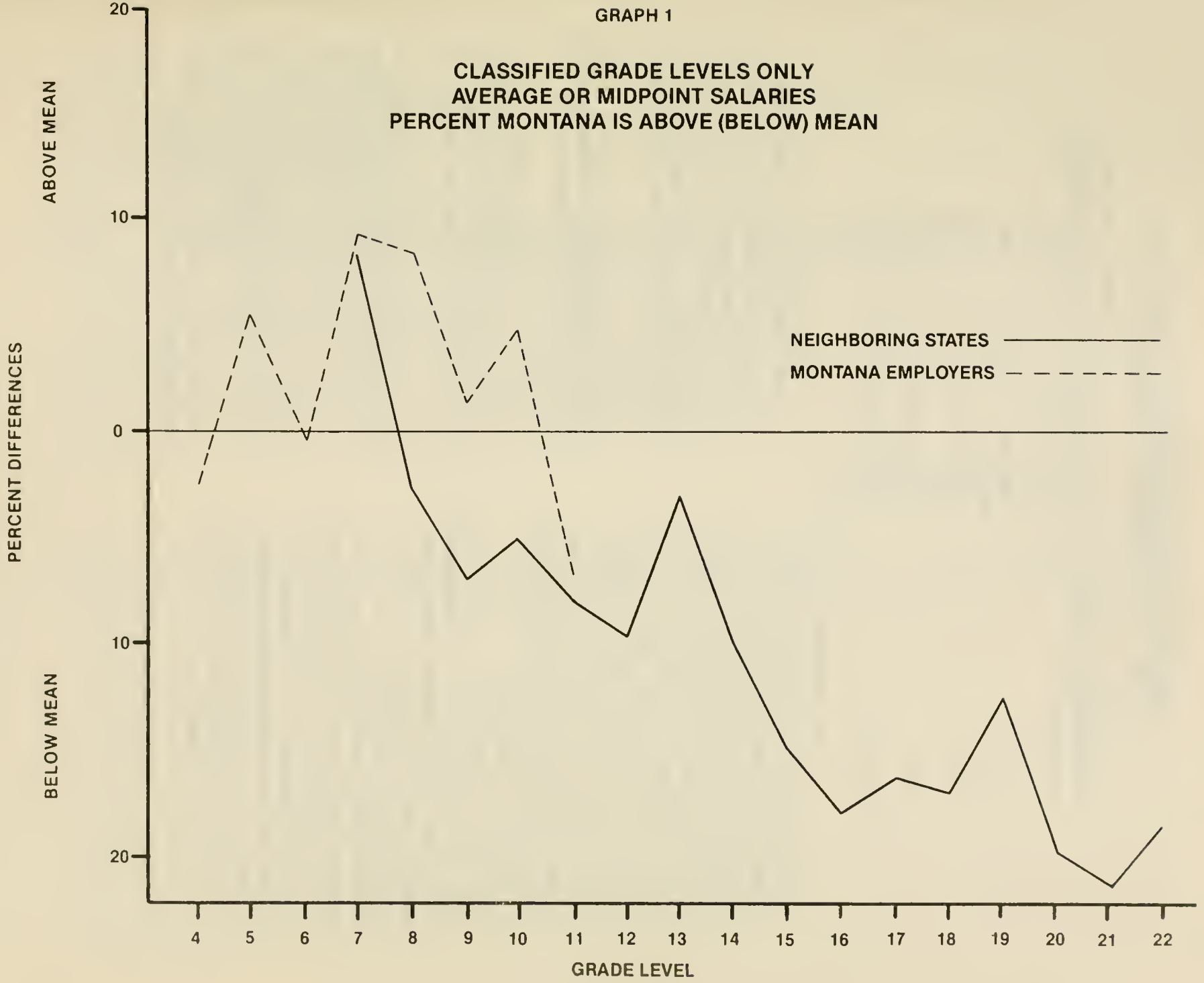
Pay for liquor store clerks represented by grade 44 is at or slightly above average. Crafts (grades 57, 59 and 60) according to both labor markets are paid satisfactory salaries by the state.

The state's institutional teachers, on the other hand, are paid less than their counterparts in the larger school districts in Montana. The larger school districts were used, since the in-state employer sample was stratified by size. In this one instance, more reliable figures might have been obtained if the smaller districts were more represented. A survey conducted by the Montana Education Association provides evidence of significant salary differences between the larger and the smaller school districts. The larger districts are more apt to be organized and generally pay higher salaries.

AVERAGE OR MIDPOINT SALARY COMPARISONS BY OCCUPATIONAL GROUP

The table on page eight shows the competitiveness of Montana average or minimum salaries by general occupational group. With the exception of professional and some technical classes, state pay is generally competitive with the averages.

GRAPH 1


CLASSIFIED GRADE LEVELS ONLY
AVERAGE OR MIDPOINT SALARIES
PERCENT MONTANA IS ABOVE (BELOW) MEAN
ABOVE MEAN
BELOW MEAN
PERCENT DIFFERENCES
20
10
0
10
20
NEIGHBORING STATES
MONTANA EMPLOYERS
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
GRADE LEVEL

COMPETITIVENESS OF MONTANA AVERAGE OR MIDPOINT SALARIES BY GENERAL OCCUPATIONAL GROUP

General Occupational Group	Employer Sample	Percent Montana is Above (Below) Survey
Professional	Neighboring States	(9.6)
	Montana	(0.4)*
Technical	Neighboring States	(7.4)
	Montana	20.8
Clerical	Neighboring States	(0.3)
	Montana	(0.6)
Crafts	Neighboring States	13.9
	Montana	(2.9)
Miscellaneous	Neighboring States	1.4
	Montana	6.9

* Includes base salaries for teachers.

There is a difference between the state's competitiveness with other states and within the state. For professional classes in general, the -9.6% figure is most revealing. Computer programmers, accountants, nurses and librarians make up the list of professional classes surveyed within the state. State nurses are paid substantially higher than the average of those employed elsewhere in Montana. This explains most of the difference between -0.4 and -9.6. Perhaps this indicates that the state's classification system, at least in this instance, does not differentiate between predominantly female and predominantly male occupations.

The technical classes surveyed within Montana are also heavily weighed in favor of predominatly female classes (health technicians, teacher aides, library assistants.) This could explain much of the diference between -7.4 and 20.8.

The salaries for crafts are 13.9 percent above neighboring states surveyed, yet 2.9 percent below the in-state employers. These different figures could be partly attributable to the idea that state classified blue collar classes are paid relatively less than those on the special state blue collar pay system. Classified blue collar classes were surveyed within but not outside Montana.

PROFESSIONAL OCCUPATIONS

The salary survey indicates that in professional occupations, state salaries have lost competitive ground despite the large pay increases made in the current biennium. The 1980 survey suggested that this was one area where the state can least afford to fall behind.

The table on the following page and Graph 2 illustrate the comparison of Montana salaries grouped by professional occupation with mean survey salaries.

Montana is 5 to 21% below mean for most professional groups. Groups where Montana salaries are slightly behind or ahead of average survey salaries include Medicine, Veterinary Medicine and Art, Photography, Journalism, and Radio/TV. Montana salaries are significantly higher than average for the following groups: Nursing, Library and Archival Sciences and Health professionals.

The survey indicates that neighboring states place more value on dentists and pharmacists in relation to other health professionals than Montana. The state's practice of assigning grades based on skill level distinctions warrants this relationship. However, the state should be aware of possible problems in being able to attract, keep and motivate qualified personnel in these fields.

PROFESSIONAL GROUPS
PERCENT MONTANA IS ABOVE (BELOW) MEAN

Occupational Group	Neighboring States	Montana Employers
Top Officials	(18.7)	*
Engineering & Architecture	(19.7)	*
Computer Science	(16.1)	(8.4)
Forestry & Agriculture Sciences	(5.3)	*
Biological Sciences	(11.0)	*
Other Physical & Life Sciences	(8.1)	*
Behavioral Sciences	(7.9)	*
Medicine	(2.9)	*
Dentistry	(20.9)	*
Veterinary Medicine	2.4	*
Pharmacy	(12.5)	*
Nursing	(0.1)	24.9
Other Health Professionals	15.8	*
Education	(18.4)	(13.2)**
Library & Archival Sciences	11.3	1.0
Law	(9.9)	*
Art/Photography/Journalism & Radio/TV	1.7	*
Accounting	(13.2)	(4.1)
General Business & Economics	(11.0)	*
Hospital Administration	(6.1)	*
Protective Services	(13.0)	*
Planning	(15.9)	*
Aviation	(10.8)	*
Total	(9.6)	(0.4)

* No data available.

** Only base (minimum) salaries are available.

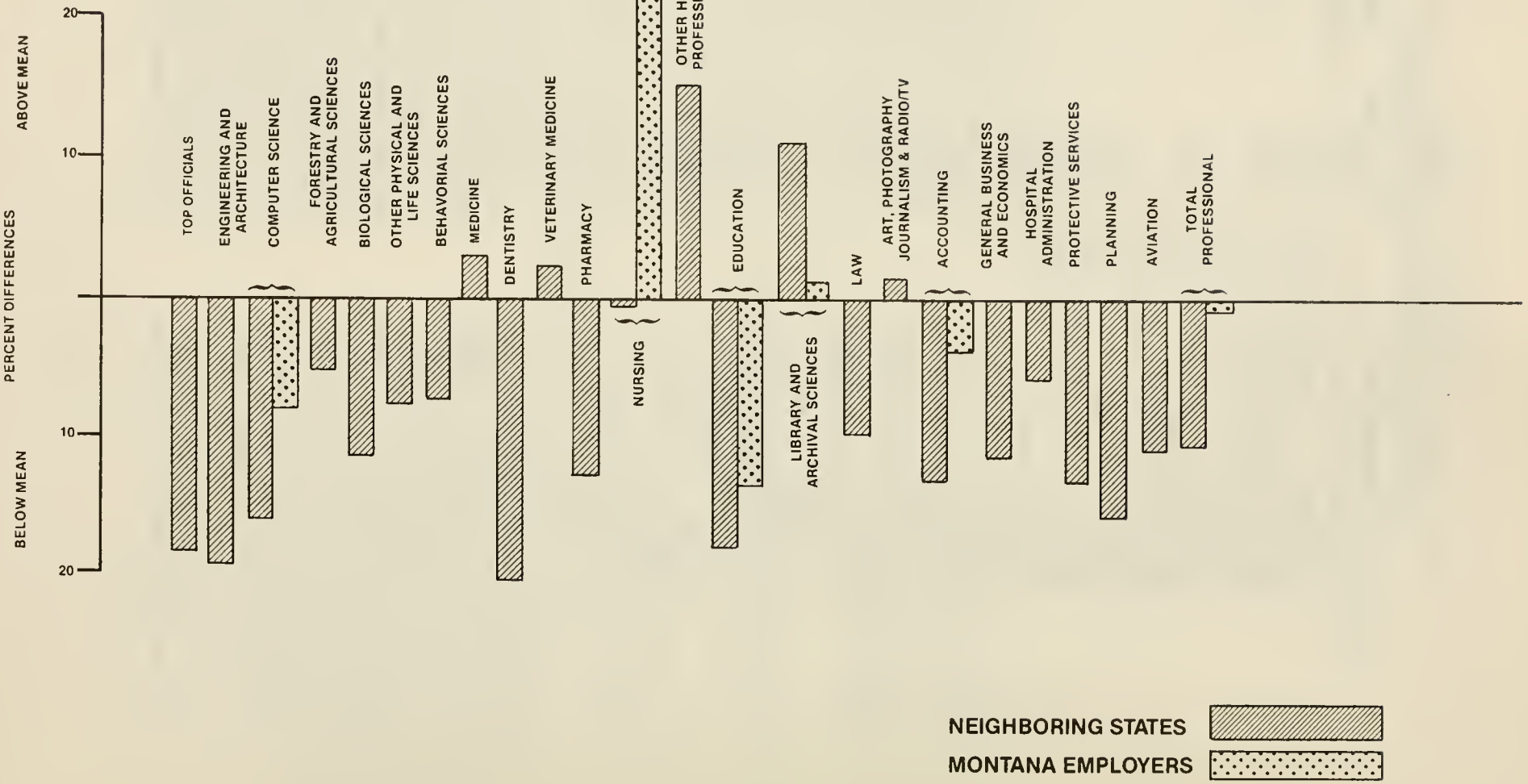
Examining specific professional classes outside the realm of occupational groups produces a list of only four other classes, not previously mentioned as part of a group, where state salaries are above average. These are: Vocational Rehabilitation Counselor I, Social Worker I, Employment Interviewer, and Management Analyst I. It is interesting to note that all of these are at the first level of a professional class series.

For most professional occupations and classes, state of Montana pay is lower than average. This statement applies to scientists, behavioral scientists, managers, program managers, and for protective service and other specialized professionals with only a few exceptions.

These exceptions are few enough to be addressed through a review of the job evaluation system and how it affects these few classes. With this conclusion and current economic conditions, there is no current justification for adjusting the salaries of specific professional occupations unless the performance of mandated services is jeopardized. A state decision to pay professional employees more in line with the labor market should be universally rather than selectively applied. Using selective remedies to correct a few market inequities could be more costly than doing nothing, because internal pay dissatisfaction would be added to many unaffected occupations where external inequity already exists.

GRAPH 2

AVERAGE OR MIDPOINT SALARIES
PROFESSIONAL GROUPS
PERCENT MONTANA IS ABOVE (BELOW) MEAN



TECHNICAL OCCUPATIONS

Salary comparisons for technical occupations are shown on the following table and on Graph 3. Montana is experiencing noticeable pay problems with the following technical groups: Electronics; Engineering and Architecture; and General Business. Groups where Montana is slightly below average include Forestry and Agricultural Sciences; Other Physical and Life Sciences; Behavioral Sciences; and Protective Services. For the remaining technical groups, Montana salaries are generally above the mean survey salaries with the exception of the Computer Science group.

Depending upon which survey is examined, the Computer Science group shows conflicting results. Computer Operators I and III were surveyed in-state, while Input/Output Controller II was surveyed out-of-state. The Computer Operator series underwent a major classification revision during this biennium, thus explaining higher than average state salaries and possibly some inadequate job matches since the term "supervisor" is no longer in the title of the higher level classes. Since only one class was surveyed out-of-state, the -24.9% figure is probably extreme but it could be indicative of below average salaries for the entire occupational group.

State salaries for Health, Education and Library Technicians are presumed to be substantially above average because the state tends to treat predominantly female occupations the same as predominatly male occupations.

Examining classes within occupational groups produces a few obvious differences. State salaries for Laboratory and Eligibility Technician supervisors seem low. State salaries paid to Farm/Ranch Hand IIs resulted in the Forestry and Agricultural Sciences group being paid less than average — the remaining two state classes are paid above average. In the Protective Services group, Correctional Officers are paid 10% below average, while GVW Enforcement Officers are paid 4% above average.

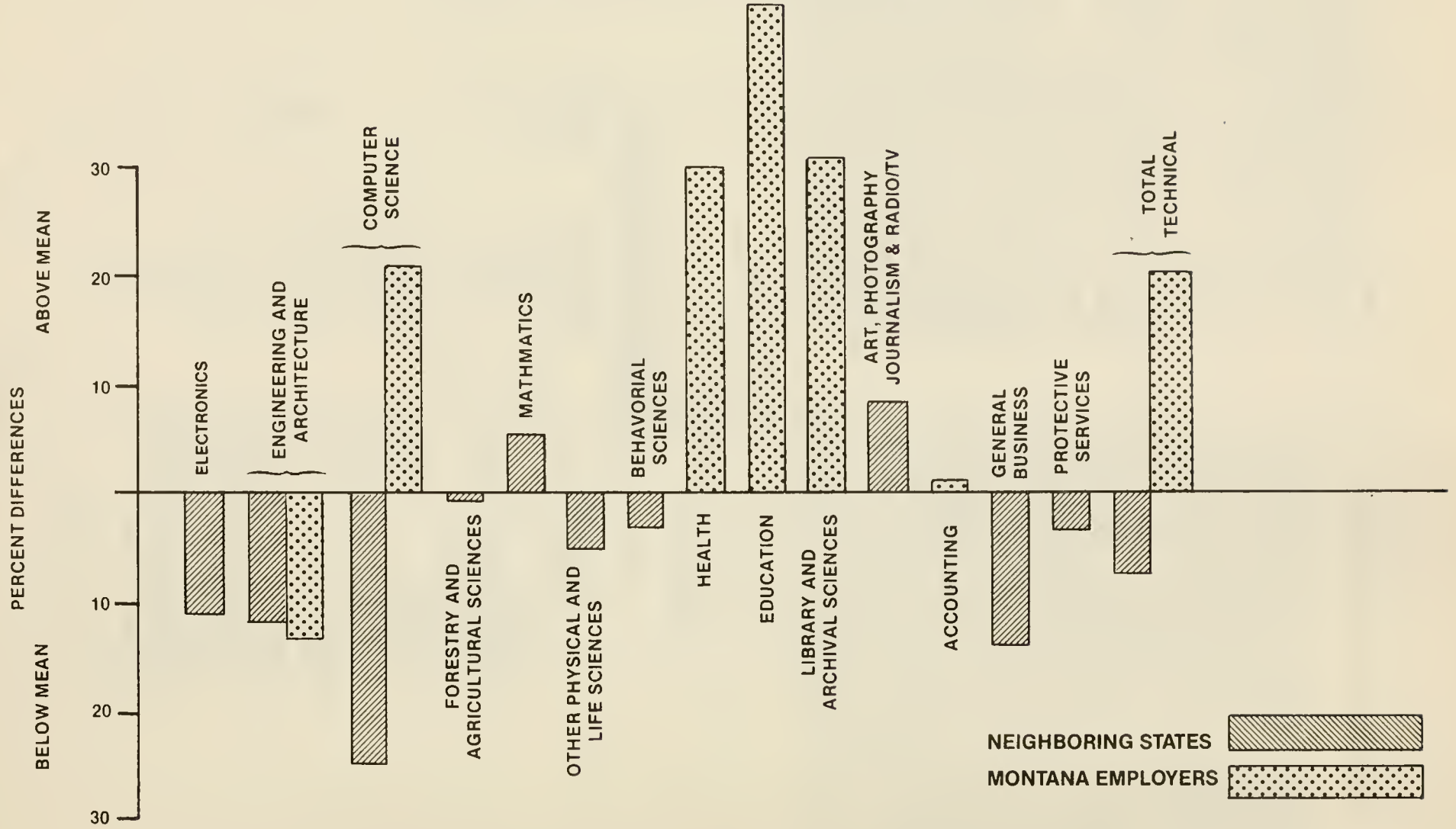
TECHNICAL GROUP
PERCENT MONTANA IS ABOVE (BELOW) MEAN

Occupational Group	Neighboring States	Montana Employers
Electronics	(11.3)	*
Engineering & Architecture	(11.6)	(13.3)
Computer Science	(24.9)	21.4
Forestry & Agriculture Sciences	(0.2)	*
Mathematics	5.7	*
Other Physical & Life Sciences	(4.5)	*
Behavioral Sciences	(2.7)	*
Health	*	30.0
Education	*	46.5
Library & Archival Sciences	*	30.9
Art/Photography/Journalism & Radio/TV	8.3	*
Accounting	*	0.7
General Business & Economics	(13.9)	*
Protective Services	(2.9)	*
Total	(7.4)	20.8

* No data available.

GRAPH 3

AVERAGE OR MIDPOINT SALARIES
TECHNICAL GROUP
PERCENT MONTANA IS ABOVE (BELOW) MEAN



CLERICAL OCCUPATIONS

The following table and part of Graph 4 compare Montana clerical salaries with those found in the survey. For Shipping and Receiving Clerks, Montana salaries are significantly below the mean of those surveyed. Montana pays about average for the General and Accounting clerical groups. Shipping and Receiving Clerks tend to comprise a male dominant occupational group. Perhaps this explains the labor market salary difference. Despite this different result, a special pay adjustment is probably not necessary since the costs of the adjustment are likely to exceed the potential benefits.

Data Entry Supervisors are the only other individual clerical class or series where state salaries are below market averages. This may indicate that other employers attach greater value to the skills of clerical supervisors.

CLERICAL GROUP
PERCENT MONTANA IS ABOVE (BELOW) MEAN

Occupational Group	Neighboring States	Montana Employers
General	(0.3)	2.1
Accounting	*	(2.2)
Shipping & Receiving	*	(16.7)
Total	(0.3)	(0.6)

* No data available.

CRAFT OCCUPATIONS

The following table and the right side of Graph 4 depict Montana craft salaries compared to those of the survey. Although not fully evident in the salary figures grouped by occupation, Montana pays lower than average salaries to its classified craftsmen and above average salaries to craftsmen paid by the separate blue collar matrix.

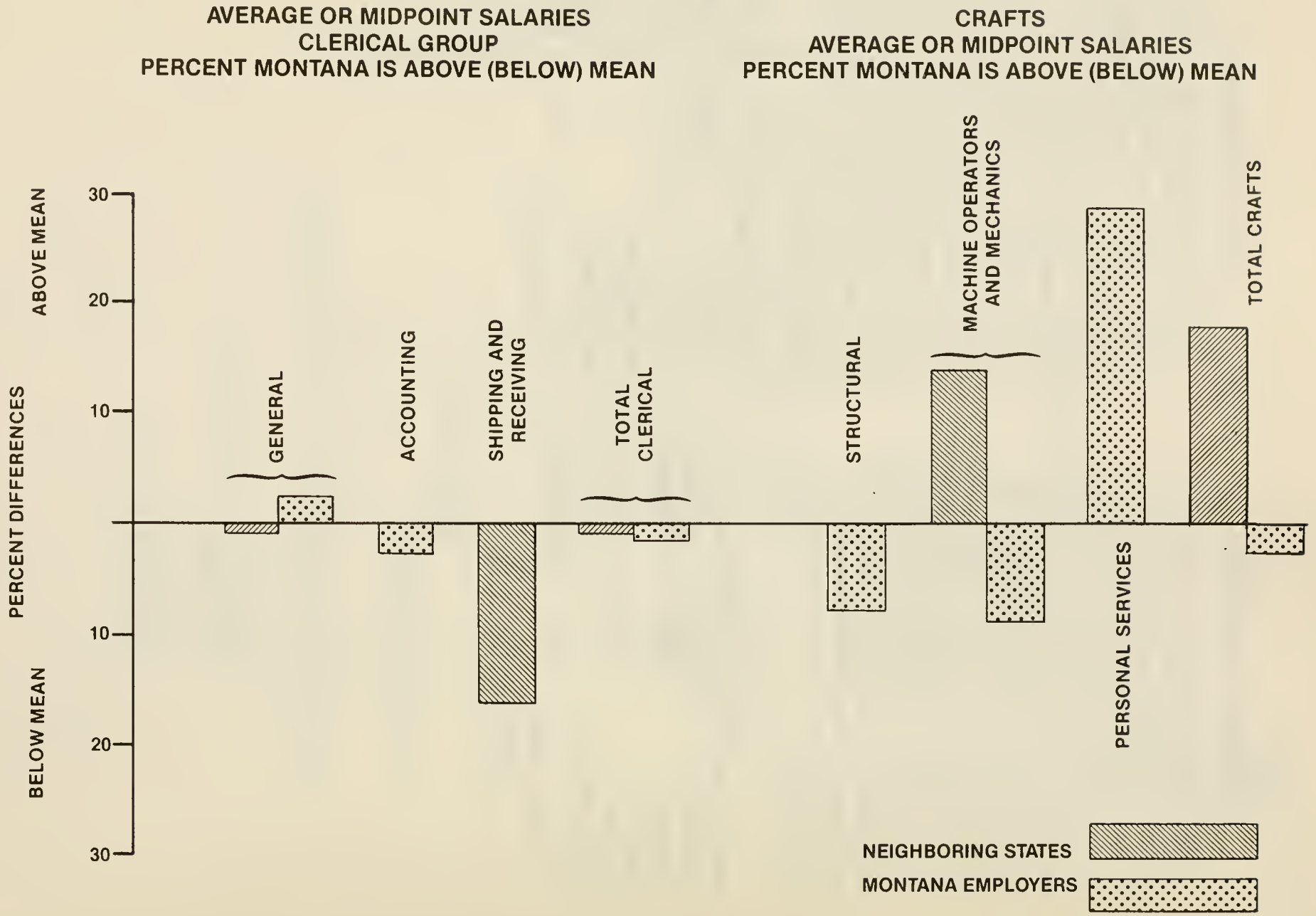
In the structural group (plumbers, carpenters, electricians, etc.) where state salaries are below average, all of the classes surveyed are classified and are not on the blue collar pay system. One of the three machine operator/mechanic classes is classified and is the major reason why state salaries are 8.8% below average for this group. Despite being classified, personal service craftsmen (bakers, butchers, barbers, etc.) continue to be paid above average by the state.

CRAFTS
PERCENT MONTANA IS ABOVE (BELOW) MEAN

Occupational Group	Neighboring States	Montana Employers
Structural	*	(7.3)
Machine Operators Mechanics	13.9	(8.8)
Personal Services	*	28.0
Total	13.9	(2.9)

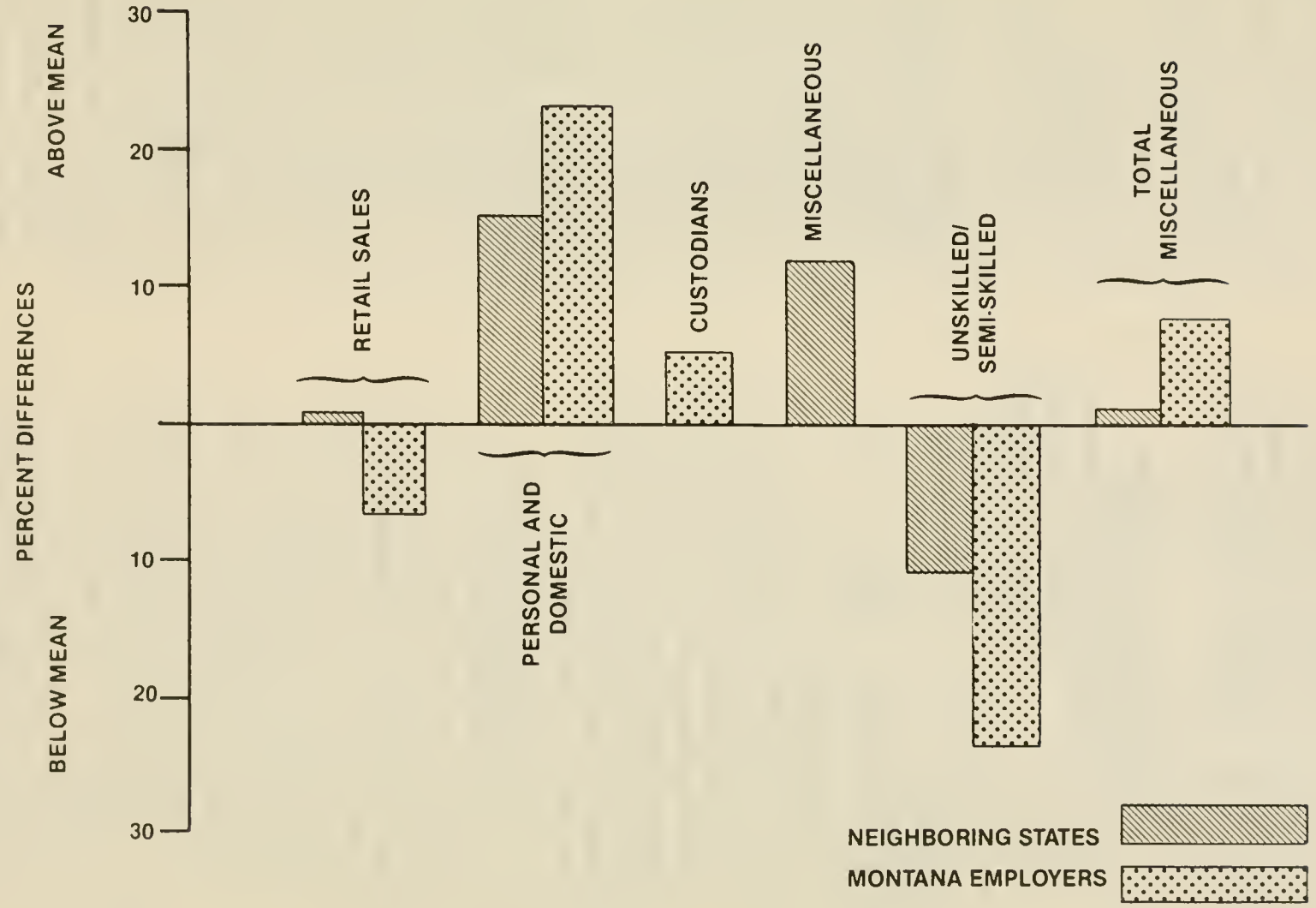
* No data available.

GRAPH 4


AVERAGE OR MIDPOINT SALARIES
CLERICAL GROUP
PERCENT MONTANA IS ABOVE (BELOW) MEAN
CRAFTS
AVERAGE OR MIDPOINT SALARIES
PERCENT MONTANA IS ABOVE (BELOW) MEAN
PERCENT DIFFERENCES
ABOVE MEAN
BELOW MEAN
30
20
10
10
20
30
GENERAL
ACCOUNTING
SHIPPING AND RECEIVING
TOTAL CLERICAL
STRUCTURAL
MACHINE OPERATORS AND MECHANICS
PERSONAL SERVICES
TOTAL CRAFTS
NEIGHBORING STATES
MONTANA EMPLOYERS

GRAPH 5

AVERAGE OR MIDPOINT SALARIES
MISCELLANEOUS GROUPS
PERCENT MONTANA IS ABOVE (BELOW) MEAN



MISCELLANEOUS OCCUPATIONS

In the following table and on Graph 5, the competitiveness of Montana salaries for Miscellaneous Groups is illustrated. Montana appears to be having pay problems with the Retail Sales group and with the Unskilled/Semi-skilled group. The state is above average in paying for Custodians, Personal and Domestic workers and workers in other miscellaneous occupations.

AVERAGE OR MIDPOINT SALARIES
MISCELLANEOUS GROUPS
PERCENT MONTANA IS ABOVE (BELOW) MEAN

Occupational Group	Neighboring States	Montana Employers
Retail Sales	0.9	(6.5)
Personal & Domestic	15.3	(23.3)
Custodians	*	5.1
Miscellaneous	12.4	*
Unskilled/Semi-skilled	(10.8)	(23.8)
Total	1.4	6.9

* No data available.

Detailed results of the salary comparisons are presented in the Technical Report. There the data are thoroughly analyzed by employer sample (neighboring states and Montana); by salary-type (minimum, maximum, average or midpoint, total compensation); by grade; by class; by occupational group; and by broad skill level. These tables begin on page 38a of the Technical Report.

GENERAL COMPENSATION AND BENEFIT DATA

General compensation and benefit data are presented in outline form and in the same order as the questionnaire. This outline includes the number of the question, the question, out-of-state summary of responses, and in-state summary of responses.

General Compensation and Benefit Questions:

1. When do you expect to grant your next general increase to your employees?
   A. Out-of-state — 7 of 9 states answered the question. Six states are expecting a general pay increase during July, while another state expects the increase during June, 1983.
   B. In-state — 134 of 172 employers answered the question. Many dates were reported with the most common being July, 1983 (47 responses); October, 1982 (12 responses); and January, 1983 (27 responses).
   C. The state of Montana is expected to grant its next general pay increase on July 10, 1983.

2. This general pay increase will average what percent?
   A. Out-of-state — None of the nine states knew what their next general pay increase is expected to be.
   B. In-state — 101 of 172 employers answered the question. The average expected increase reported is 6.7%.
   C. The state of Montana's next general pay increase is not known at this time.

3. In addition to general increases, do you also grant other automatic pay increases based directly upon percent changes in cost of living or consumer prices?
   A. Out-of-state — All 9 states said no to having automatic COLA pay increases.
   B. In-state — 156 of 172 employers answered the question. 142 said no to having automatic COLA pay increases.
   C. The state of Montana does not grant COLA pay increases.

4. Exclusive of general and cost of living type pay increases, do your employees receive additional pay increases based on their length of service with the organization?
   A. Out-of-state — All 9 states answered the question. 4 said yes and 5 said no to having longevity type pay increases. Including automatic steps if performance is standard, changes the responses to 7 yes and 2 no.
   B. In-state — 163 of 172 employers answered the question. 97 said no and 66 said yes to having longevity pay increases.
   C. The state of Montana grants pay increases for longevity through its automatic steps and through a 1% adjustment for each five year service increment.

5. If your answer to question 4 is yes, please explain your system by giving an illustration as to what percent increase is granted to reward an employee for a specific number of years service.

A. Out-of-state — In one state, if performance is standard, a step amounting to 5% is allowed for each of the first five years of service. In another state 2.5% is allowed for each five year increment of service. In still another state, if performance is standard, employees with at least 8 years of service receive $75 semi-annually with an increase of $25 semi-annually each year to a maximum of 20 years. The fourth state pays $30 per month for each five year service increment. Three other states provide annual step increases for standard performance. In two of these three states, the annual steps amount to 5% each.

B. In-state — Eight employers start providing longevity pay adjustments after the completion of three months of service ranging from increases of a few cents per hour to 16% of base salary. Seven employers start providing longevity pay adjustments after the completion of six months of service ranging from a flat $50 per month to a 4-5% raise to base salary. Thirty employers start providing longevity pay adjustments annually up to 15 years, in a few cases, ranging from 2¢ per hour to 7% of salary per annual increment. One employer provides 1% and another employer 4% for each three year service increment. Five employers start providing longevity pay adjustments after five years of service ranging from ½ to 5% for each five year service increment. Three employers have two systems similar to the practices used by the state of Montana. One employer provides for $100 annually in lieu of 15 years of service. The remaining 13 employers providing for longevity increments did not explain service requirements or amounts allotted.

C. The state of Montana has two systems for rewarding longevity with pay. Under the first system, an employee receives a 5% pay increase after the first six months of service and 2% for each year of service thereafter. Under the second system, an employee receives about 1% for each five year service increment.

6. Are your most productive employees given pay increases exceeding those given to average or less than average producing employees?

A. Out-of-state — All 9 states answered the question. 6 said yes and 3 said no to having merit pay increases.

B. In-state — 164 of 172 employers answered the question. 86 said yes and 78 said no. Since the last survey, significantly more employers are providing this type of pay increases.

C. The state of Montana does not grant merit pay increases. A bonus system has been recommended by the Personnel and Labor Relations Study Commission.

7. If your answer to question 6 is yes, please briefly explain your merit pay system.

A. Out-of-state — One state provides for a bonus of up to 10% for outstanding performance. Three states provide merit pay tied to relative budgetary allotments. The merit pay system in one state is not standardized and could vary by agency; this state also provides for some cash awards. One other state provides for merit pay adjustments as often as every six months.

B. In-state — Two employers use a point system tied to budget allotments, to position in range and to performance for determining the amounts of merit raises. For three other employers, budgetary allotments connected to a point system are a major factor. Nine employers emphasize individual positions in range and performance for determining merit raises. Eight other employers determine merit raises from profit or cost containment that can be attributable to an individual or a group of employees. Four employers have committees established to review supervisory requests for merit raises. The other 60 employers with merit pay systems only indicate that such decisions are based on performance.

C. A state of Montana merit pay system has not been implemented yet. However, the Personnel and Labor Relations Study Commission has recommended bonuses for deserving performances to be distributed throughout the grade levels for up to 20% of all unorganized personnel. The specifics of the system need to be developed by the

Department of Administration after approval is provided by the State Legislature.

8. If your answer to question 6 is yes, what tools do you use to distinguish among employee performance levels for pay purposes (i.e., management-by-objectives, results-oriented performance appraisals, attitude-type performance appraisals, forced employee ranking systems and/or supervisor discretion)?
   A. Out-of-state — 5 of the 6 states providing merit-type pay increases answered the question. 2 of the 5 states use MBO type appraisals. 4 of the 5 states use results-oriented appraisals. None of the states used atittude-type appraisals. 2 of the 5 states used employee ranking systems. Only 1 state used supervisor discretion to distinguish among employee performance levels for pay purposes.
   B. In-state — 81 of the 86 employers providing merit-type pay increases answered the question. 16 of the 81 employers use MBO type appraisals. 55 of the 81 employers use results-oriented appraisals. 29 of the 81 employers use attitude-type appraisals. Only 5 of the 81 employers use employee ranking systems. 33 of the 81 employers used supervisor discretion to distinguish among employee performance levels for pay purposes.
   C. The state of Montana is likely to use a results-oriented performance appraisal system that is individually patterned for the performance of pre-determined goals and objectives. Some supervisor discretion is inevitable but will be limited by employee input in establishing objectives and performance standards. Employee attitudes will not be a factor.

9. If your answer to question 6 is yes, does your merit pay system increase or decrease employee satisfaction and increase or decrease productivity in your organization?
   A. Out-of-state — Only 1 of the 6 states providing merit-type pay increases answered the question. In this case, it is said that the merit pay system results in increased employee satisfaction and increased productivity.
   B. In-state — 62 of the 86 employers providing merit-type pay increases answered the question. 60 employers said that their merit pay system results in increased employee satisfaction and 1 employer said that their merit pay system results in decreased employee satisfaction. 61 employers said that their merit pay system results in increased productivity and one employer said that their system results in decreased productivity.
   C. The state of Montana does not currently have a merit pay system and is unable to answer this question at this time.

10. Can your employees get cash awards for making suggestions to improve or streamline operations?
   A. Out-of-state — All 9 states answered the question. 6 said yes and 3 said no to providing cash awards for worthy employee suggestions.
   B. In-state — 163 of 172 employers answered the question. 23 said yes and 140 said no to providing cash awards for worthy suggestions.
   C. The state of Montana has had a suggestion system since April, 1982.

11. Please explain any other system, other than promotion, by which your employees can increase their salaries.
   A. Out-of-state — Only one state mentioned another pay increase system not previously discussed. This state provides for pay increases up to 5% for assuming additional responsibilities which do not result in a higher classification.
   B. In-state — Six employers provide pay increases upon acquisition of professional registration/accreditation. Twelve employers provide bonuses in addition to their merit pay systems. Two employers allow employees to perform more work for additional pay. Two employers indicated that they pay shift differentials.
   C. The state of Montana does not have any other major system for increasing salaries.

12. What other things do you do to increase employee productivity?
   A. Out-of-state — One state uses some tuition reimbursement, training programs and per-

formance appraisal to increase productivity. Another state uses a comprehensive benefit system and flex-time. One other state has established a productivity office.

B. In-state — 49 employers specified that they use formal training and occasionally tuition reimbursement to enhance productivity. 23 employers specified using performance evaluations or MBO to improve productivity. 15 employers specified using a managerial style emphasizing good, frequent communication, employee participation and a pleasant working environment to enhance productivity. 4 employers conduct periodic staff meetings to improve productivity. 2 employers encourage internal promotions. 3 employers use varied work schedules or shift preferences to improve productivity. 5 employers offer good benefits to enhance productivity. 4 employers offer safety awards or service pins. One employer specified paying for professional membership fees. 4 employers use only the best equipment. One employer encourages job rotation. Two employers provide for employee assistance and counseling. Two employers use job security to encourage productivity. Two employers are cutting back on idle employee time by reduction in force through attrition.

C. To improve productivity, the state of Montana provides some formal training, some tuition reimbursement, flex-time, results-oriented performance appraisals, and justified workforce reductions. A state employee assistance program is also under consideration. Individual agencies may do other things to improve productivity.

13. How many total days **paid** leave do your employees receive on the average per calendar year (include paid holidays, vacation leave, sick leave, military leave, and educational leave)?
    A. Out-of-state — All 9 states answered the question. The average leave usage reported is 35.4 days annually.
    B. In-state — 170 of 172 employers answered the question. The average leave usage reported is 26.4 days annually. Responses of no paid leave are included in the average.
    C. The state of Montana's estimated average usage is about 37 days annually.
14. Are your employees covered by Social Security?
    A. Out-of-state — All 9 states answered the question. Only two of these said no to being in the Social Security program.
    B. In-state — 170 of 172 employers answered the question. All of these said yes to being in the Social Security program.
    C. The state of Montana is in the Social Security program.
15. Excluding contributions to Social Security, what average percent of an employee's salary does your organization contribute toward retirement and/or profit-sharing?
    A. Out-of-state — All 9 states answered the question. The average retirement contribution reported is 8.9%.
    B. In-state — 155 of 172 employers answered the question. The average retirement and profit sharing contribution reported is 6.0%. Responses of no contribution are included in the average.
    C. The state of Montana's average retirement contribution is 6.3%.
16. What average monthly dollar amount does your organization contribute toward group insurance premiums for each employee (include payments on health, life, dental, vision, and disability insurance plans for the employee and his dependents)?
    A. Out-of-state — All 9 states answered the question. The average insurance contribution reported is $74 per month.
    B. In-state — 161 of 172 employers answered the question. The average insurance contribution is $86 per month. Responses of no contribution are included in the average.
    C. The state of Montana's insurance contribution is $80 per month.
17. What percent of all your employees, including administrative, are formally organized for bargaining purposes?
    A. Out-of-state — 8 of 9 states answered the question. The average percent of bargaining organization is 7.2%. One state is 45% organized, while two others are 5% and 8% union. The other five states are completely non-union and are included in the average.

B. In-state — 168 of 172 employers answered the question. The average percent of bargaining organization is 25.3%. Non-union employers are included in the average.
C. Employees of the state of Montana are 60% organized in 76 different bargaining units.

18. If your answer to question 17 is greater than 0%, what effect has organized bargaining had on your pay system for non-organized employees?
A. Out-of-state — In the state that is 45% unionized and in the state that is 8% unionized, bargaining for wages is not allowed. In the other state, organized bargaining has had no effect on the pay system.
B. In-state — 36 employers stated that non-unionized pay increases have been about the same as unionized pay increases and in many cases pay for all employees is presumably somewhat higher because of some employees being unionized. 4 employers indicated that non-union pay increases have been offset by higher pay increases to unionized employees. 4 employers stated that unionized pay increases have had to result in special pay adjustments to some classes whose pay scales have been affected by compression. One employer said that unionization has reduced their range of rates paid for a given skill level. 3 employers simply stated that union and non-union employees are paid by separate pay schedules. 22 employers stated without qualification that unionization has had no effect on the pay system for non-organized employees.
C. In the state of Montana organized and non-organized employees are both given the same average percentage increase each year. Often the distribution of this average increase is affected. For example, lower level employees could get higher percentages than others, thereby affecting relative relationships between grade levels.

19. On the average, how many promotions (include career ladder promotions) can your new hires expect to receive within the first five years of their employment?
A. Out-of-state — 5 of 9 states answered the question. The average reported promotions within five years is 2.4.
B. In-state — 122 of 172 employers answered the question. The average reported promotions within five years is 1.8.
C. The average state of Montana employee can reasonably be expected to be promoted twice within the first five years of employment with the state.

20. What percent of all your employees do you expect to terminate their employment with your organization within the next twelve months?
A. Out-of-state — 6 of 9 states answered the question. The average reported turnover rate is 19.9%
B. In-state — 152 of 172 employers answered the question. The average reported turnover rate is 13.6%. Responses of no turnover are included in the average.
C. The state of Montana currently has no reliable statewide estimate of turnover.

21. How many people do you currently employ (in Montana for in-state employers)?
A. Out-of-state — All 9 states answered the question. The average reported number of people employed is 12,632. This figure is low for total state employment since several states did not include university staff. For all 9 states this sums to 113,687 employees.
B. In-state — 168 of 172 employers answered the question. The average reported number of people employed in Montana by responding employers is 244. This sums to 40,999 employees.
C. The state of Montana employs about 15,000 people including universities and about 10,500 people excluding universities.

The analyses of these general compensation and benefit questions are presented in tabular format in the Technical Report beginning on page 29a.

SUMMARY OF RESULTS

In general, the following conclusions can be drawn from this salary and benefit survey:

1. Most lower graded state employee salaries are at or above market averages, while state employee salaries at classified grades 11 and above are below market averages.

2. Except for teachers, state salaries of employees paid by special pay matrices (retail clerks, blue collar, etc.) are at or above market averages.
3. The salaries of most of the state's experienced professionals and managers continue to be significantly below market averages.
4. There is evidence that most employers in both labor markets increase the salaries of satisfactory employees faster than the State of Montana. The state's minimum salaries are generally more competitive than its maximum and average or midpoint salaries.
5. Evidence from both surveys suggest that the state's classification system allocates grade levels from a perspective of value to the organization and treats predominantly female occupations the same as predominantly male occupations. There tends to be more salary differences of this type in the marketplace than within the state's system.
6. The state's group insurance contribution is about in line with the market.
7. The state's retirement contribution is below the average of neighboring state contributions but slightly above the average of Montana employer contributions.
8. State employees receive more paid leave time than those employed elsewhere in the two labor markets.
9. State pay and benefit increases during this biennium maintained the state's market position for experienced professionals and managers and improved the state's market position for lower graded positions.
10. This biennium's percentage rather than flat dollar adjustments to classified grades 15 and above kept the state's market position at these levels from further deterioration and prevented further salary compression.

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